

IN THE CLAIMS

1       1. (original) In a data processing system, a method comprising the steps of:  
2               creating a migratable storage tree with a storage root key; and  
3               creating a non-migratable storage tree with the storage root key, wherein the migratable  
4       storage tree and the non-migratable storage tree are identically structured.

1       2. (original) The method as recited in claim 1, wherein the migratable storage tree and the  
2       non-migratable storage tree are created by a trusted computing module in accordance with  
3       Trusted Computing Platform Alliance.

1       3. (original) The method as recited in claim 1, wherein the migratable storage tree  
2       comprises migratable keys and a user key, wherein the non-migratable storage tree comprises  
3       non-migratable keys and a user key.

1       4. (original) The method as recited in claim 1, wherein the non-migratable storage tree will  
2       include non-migratable storage keys corresponding to each migratable storage key in the  
3       migratable storage tree.

1       5. (original) The method as recited in claim 1, wherein use authorization in the  
2       non-migratable storage tree will be identical to use authorization in the migratable storage tree.

1       6. (original) The method as recited in claim 1, further comprising the steps of:  
2               requesting a migratable storage key; and  
3               requesting a non-migratable storage key.

1       7. (original) The method as recited in claim 6, wherein the step of requesting a migratable  
2       storage key will identify a parent key in the migratable storage tree, and wherein the step of

3 requesting a non-migratable storage key will identify a parent key in the non-migratable storage  
4 tree that corresponds to the parent key in the migratable storage tree.

1 8. (original) The method as recited in claim 1, further comprising the step of:  
2       when a key loading request is made for a migratable storage key, loading a key from the  
3 non-migratable storage tree instead of loading a corresponding key from the migratable storage  
4 tree.

1 9. (original) In a data processing system, a method comprising the steps of:  
2       splitting a request to create a new migratable storage key with given authentication data  
3 and a first parent key into first and second commands;  
4       wherein the first command creates a migratable storage key with the given authentication  
5 data and the first parent key; and  
6       wherein the second command requests creating a non-migratable storage key with the  
7 given authentication data and a second parent key which is determined from looking up a key  
8 that corresponds to the first parent key in a database.

1 10. (original) The method recited in claim 9, wherein the migratable storage key and the  
2 non-migratable storage key are associated in a database.

1 11. (original) The method recited in claim 9, wherein the non-migratable key is a multi-  
2 prime key.

1 12. (original) The method recited in claim 9, where the non-migratable key is an elliptic  
2 curve key.

1 13. (original) The method as recited in claim 9, further comprising the steps of:

2 creating a new migratable signing key with the given authentication data and a third  
3 parent key;

4 storing the new migratable signing key with the given authentication data and the third  
5 parent key;

6 storing the new migratable signing key with the given authentication data and a fourth  
7 parent key where the fourth parent key is a non-migratable key associated with the third parent  
8 key in a database.

1 14. (original) The method as recited in claim 13, further comprising the steps of:

2 requesting a signature by the new migratable signing key;

3 searching the database for the location of a key blob containing the new migratable  
4 signing key;

5 loading a copy of the new migratable signing key stored in the key blob created with the  
6 non-migratable parent key; and

7 signing with the new migratable signing key.

1 15. (original) The method as recited in claim 9, further comprising the steps of:

2 creating a new data stored by means of the first parent key;

3 storing the new data with the first parent key;

4 storing the new data with the second parent key where the second parent key is a non-  
5 migratable key associated with the third parent key in a database.

1 16. (original) The method as recited in claim 15, further comprising the steps of:

2 requesting data stored by the new migratable storage key;

3 searching the database for the location of a key blob associated with the new migratable  
4 storage key;

5                   loading a copy of the key blob created with the non-migratable storage key; and  
6                   decrypting the data.

1       17. (original) The method as recited in claim 14, further comprising the steps of:  
2                   requesting migration of new migratable signing keys;  
3                   searching the database for the location of a key blob associated with a non-migratable  
4                   parent of the key to be migrated;  
5                   processing the migration.

1       18. (original) In a data processing system, a method comprising the steps of:  
2                   creating a migratable storage tree with a storage root key; and  
3                   creating a non-migratable storage tree with the storage rootkey where the migratable  
4                   storage tree and the non-migratable storage tree are identically structured with corresponding  
5                   keys and authentication data.

1       19. (original) The method as recited in claim 18, wherein the migratable storage tree and the  
2                   non-migratable storage tree are created by a trusted computing module in accordance with  
3                   Trusted Computing Platform Alliance.

1       20. (original) The method as recited in claim 19, wherein the migratable storage tree  
2                   comprises migratable keys and a user key, wherein the non-migratable storage tree comprises  
3                   non-migratable keys and a user key.

1       21. (original) The method recited in claim 18, wherein the migratable storage tree comprises  
2                   migratable keys and encrypted user data wherein the non-migratable storage tree comprises non-  
3                   migratable keys and encrypted user data .

1 22. (original) The method as recited in claim 18, wherein the non-migratable storage tree  
2 will include non-migratable storage keys corresponding to each migratable storage key in the  
3 migratable storage tree.

1 23. (original) The method as recited in claim 18, wherein the non-migratable storage tree  
2 will include non-migratable storage keys corresponding to a subset of the migratable storage  
3 keys in the migratable storage tree.

1 24. (original) The method as recited in claim 18, wherein use authorization in the non-  
2 migratable storage tree will be identical to use authorization in the migratable storage tree.

1 25. (original) The method as recited in claim 18, wherein use authorization in the non-  
2 migratable storage tree can be deduced from user authorization in the migratable storage tree  
3 with additional data.

1 26. (original) The method as recited in claim 25, wherein the use authorization in the non-  
2 migratable storage tree is obtained by hashing the concatenation of the user authorization in the  
3 migratable storage tree with a fixed string.

1 27. (new) The method as recited in claim 1, wherein a migratable key can be transferred to  
2 other trusted platform module chips, and wherein a non-migratable key cannot be transferred to  
3 other trusted platform module chips.